

Attorney Docket No. P08430-US3

REMARKS/ARGUMENTS**1.) Claim Amendments**

Claims 21-47 are pending in the application. The Applicants have amended claims 24 and 34 herein. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Claim Objections

The Examiner objected to claim 34 because of an informality, namely a typographical error in the word "code" on line 2. The Applicants have amended the claim to correct the informality. Therefore, the withdrawal of the objection is respectfully requested.

3.) Claim Rejections – 35 U.S.C. § 102(e)

The Examiner rejected claims 21-23 and 25-32 under 35 U.S.C. § 102(e) as being anticipated by Willars, et al. (US 5,831,978). The Applicants respectfully disagree and request the Examiner's reconsideration of claims 21-23 and 25-32 based on the following remarks.

Claim 21 recites a method for including Frame Time Indication for cell searching in a wireless communications system. The method includes the steps of transmitting by a mobile station, in each slot of a frame, a primary synchronization code and a secondary synchronization code; and modulating the secondary synchronization code by one of Nmod valid sequences. The secondary synchronization code comprises $\text{Log}_2(\text{Nssc})$ bits of information to be used for a long code (i.e., scrambling code) indication.

The Examiner notes that Willars discloses utilizing more than one code channel to transmit a plurality of channel frames (Col. 4, line 59 through col. 5, line 9), and apparently equates this to the primary and secondary synchronization codes recited in claim 21. The Examiner then states, "The secondary code will comprise a plurality of bits, wherein the term "Nssc_seq" equals $e^{(\text{bits of information})}$. For transmission from the mobile, all information is modulated by a "valid" modulating sequence." The Examiner does not provide any indication of where Willars discloses a secondary

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synchronization code comprising $\text{Log } 2(N_{\text{ssc}})$ bits of information to be used for a long code (i.e., scrambling code) indication. The Applicants contend that this feature is not disclosed by Willars.

The Applicants also argue that the plurality of code channels utilized to transmit the plurality of channel frames in Willars does not equate to the primary and secondary synchronization codes recited in claim 21. The channel codes in Willars are channel-unique spreading codes utilized to uniquely identify information transmitted on different code channels in a spread spectrum communication system. The channel codes are not synchronization codes. As noted in the Applicants' specification on page 6, lines 6-10, "Before any radio frequency communications or information transfer between a base station and a mobile station of the spread spectrum communications system can occur, the mobile station must find and synchronize itself to the timing reference of the base station." The claimed primary and secondary synchronization codes enable this synchronization to occur in a novel and unobvious manner that is not taught or suggested by Willars. Therefore, the withdrawal of the rejection under § 102(e) and the allowance of claim 21 are respectfully requested.

Claims 22-23 depend from claim 21 and recite further limitations in combination with the novel elements of claim 21. Therefore, the allowance of claims 22-23 is respectfully requested.

Independent claim 27 also recites the synchronization codes that are not taught or suggested by Willars. Therefore, the withdrawal of the rejection under § 102(e) and the allowance of claim 21 are respectfully requested. Claim 27 also recites that the secondary synchronization codes comprises $\text{Log}_2(N_{\text{ssc_seq}})$ bits of information to be used to obtain a long code indication, and the secondary synchronization code is modulated by one of N_{mod} valid sequences. These features of the secondary synchronization code are not taught or suggested by Willars. Therefore, the withdrawal of the rejection under § 102(e) and the allowance of claim 27 are respectfully requested.

Claims 28-32 depend from claim 27 and recite further limitations in combination with the novel elements of claim 27. Therefore, the allowance of claims 28-32 is respectfully requested.

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Willars Disqualified as Prior Art

Alternatively, the Applicants argue that since Willars does not disclose each and every element of independent claims 21 and 27, then even if the Examiner maintains a rejection, the rejection is actually an obviousness rejection under 35 U.S.C. § 103. The instant application was filed after November 29, 1999. Therefore, under 35 U.S.C. § 103(c), Willars no longer qualifies as prior art because it was commonly owned at the time the invention was made. (see also MPEP 706.02(I)(1)).

At the time the invention was made, the instant application and Willars were owned by the same entity – Telefonaktiebolaget LM Ericsson. The ownership information is indicated on the face of Willars, and is shown for the instant application in an assignment recorded with the U.S. Patent and Trademark Office on February 13, 2001 at reel/frame 011547/0605.

Thus, all the requirements of 35 U.S.C. § 103(c) have been met, and Willars is disqualified as prior art in the instant application. Therefore, the allowance of claims 21-23 and 27-32 is respectfully requested.

4.) Allowable Subject Matter

The Examiner objected to claim 24 for being dependent on a rejected base claim, but stated that it would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claim 24 has been rewritten in this manner. Therefore, the allowance of claim 24 is respectfully requested.

5.) Claim Rejections – 35 U.S.C. § 101- Double Patenting

The Examiner rejected claims 36-40 under 35 U.S.C. § 101 as claiming the same invention as that of claims 1, 4, 7, 5 and 6, respectively, of prior U.S. Patent No. 6,185,244. The Applicants respectfully disagree because there is a key difference between claims 36-40 and claims 1, 4, 7, 5, and 6 of U.S. Patent No. 6,185,244.

Claims 36-40 depend from base claim 33, which recites that although the base station generates an identifying code set comprising a plurality of code words, the base station transmits "at least one of the code words included in said identifying code set". Thus, although the code set includes a plurality of code words, the base station may

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transmit only one of them. Claim 1 of U.S. Patent No. 6,185,244 on the other hand, recites that the base station transmits the entire code set formed by concatenating an inner and an outer code. Thus, claims 36-40 are not claiming the same subject matter as U.S. Patent No. 6,185,244. Therefore, the withdrawal of the double patenting rejection is respectfully requested.

6.) Claim Rejections – Obviousness-Type Double Patenting

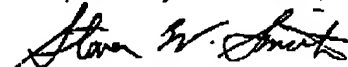
The Examiner rejected claims 33-47 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 and 17-19 of US Patent No. 6,185,244. The Applicants have filed a Terminal Disclaimer herewith to overcome this rejection. An authorization to charge Deposit Account No. 50-1379 for the Terminal Disclaimer fee under 37 C.F.R. 1.20(d) is enclosed herewith. Therefore, the allowance of claims 33-35 and 41-47 is respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 21-47.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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